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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/058,869 | Applicant(s) VAN BEEK ET AL. |
| | Examiner AARON SANDERS | Art Unit 2168 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 June 2002.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-30 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 2-30 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 17 June 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449)
 Paper No(s)/Mail Date See Continuation Sheet
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) Notice of Informal Patent Application
 6) Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :02/26/02, 03/10/05, 08/28/06, 09/26/06, 03/05/07, 12/12/07, 03/03/08, and 03/27/08.

DETAILED ACTION

Priority

This application claims priority of provisional application 60/269,786, filed 15 February 2001.

Response to Amendment

Applicant's preliminary amendment filed 3 June 2002 has been entered. Claims 2-30 are pending. Claim 1 is canceled. This action is non-final.

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because hand drawn figures are not accepted. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "description scheme[s]" of claims 9, 15, 21, 25-28, and 30 must be shown or the feature(s) canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because it contains the title of the invention. The sheet or sheets presenting the abstract may not include other parts of the application or other material. Further, the abstract is improper because it does not allow “the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure.” See 37 C.F.R. 1.72.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: Video Segmentation Description Scheme Containing Both Search and Navigation Attributes.

Double Patenting

A rejection based on double patenting of the “same invention” type finds its support in the language of 35 U.S.C. 101 which states that “whoever invents or discovers any new and useful process... may obtain a patent therefor...” (Emphasis added). Thus, the term “same invention,” in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 15-19, 22, and 28 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4, 7, and 9 of copending application 10/867,981. The following table shows the claims in application 10/058,869 that are rejected by the corresponding claims in application 10/867,981.

| Claims Comparison Table | |
|-------------------------|------------|
| 10/867,981 | 10/058,869 |
| 1 | 15 |
| 2 | 16 |
| 3 | 17 |
| 4 | 19 |

| | |
|---|----|
| 7 | 22 |
| 9 | 28 |

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-22 and 25-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 9-22 and 25-30 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable storage medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming nonfunctional descriptive material, here a data structure, stored on a computer-readable storage medium, in a computer, or on an electromagnetic carrier signal, does not make the claims statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). Rather, the disclosed data structure must be “a physical or logical relationship among data elements, designed to support specific data manipulation functions” (*The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition*, IEEE Press, 2000). As such, the instant claims are non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-22 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Qian et al., “Description Schemes for Consumer Video Applications,” ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999 (Qian).

2. Qian teaches “A description scheme related to at least one of video and audio comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) searching attributes where said searching attributes enables searching of the content of said at least one of video and audio,” see § 2, “For a given video program, we propose a *program description scheme* which... establishes distinctive characteristics to enable

filtering and search. We term the... established characteristics as *program profiles*... Typical program profiles include a) general profile, b) category profile, c) time profile, d) keyword profile, e) token profile, f) event profile, g) character profile, and h) object profile," where the claimed "searching attributes" are the referenced "program profiles."

Qian teaches "(b) navigation attributes where said navigation attributes enables selection of a segment of said at least one of video and audio," see § 2, "For a given video program, we propose a *program description scheme* which a) defines logical structures to facilitate browsing... We term the defined logical structures as *program views*... Typical program views include a) thumbnail view, b) slide view, c) frame view, d) shot view, e) key-frame view, f) highlight view, g) event view, and h) close-up view," where the claimed "navigation attributes" are the referenced "program views."

Qian teaches "and (c) wherein said searching attributes and navigation attributes are within a single description scheme," see § 2, "For a given video program, we propose a *program description scheme* which a) defines logical structures to facilitate browsing and b) establishes distinctive characteristics to enable filtering and search," where the claimed "single description scheme" is the referenced "program description scheme."

3. Qian teaches "The description scheme of claim 2 wherein said description scheme may be used in a manner such that said segments are viewed by a viewer," see § 3.1.2, "The descriptor <HighlightView> specifies clips to form highlights of a program" and § 1, "You start interacting with the appliance... The appliance... invokes your user profile (which is indeed different than your spouse's and children) to customize your viewing experience and anticipate your needs."

4. Qian teaches “The description scheme of claim 2 wherein said description scheme may be used in a manner such that each of said segments may be viewed by a viewer and includes a plurality of frames,” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>... The descriptor <HighlightView> specifies clips to form highlights of a program.”

5. Qian teaches “The description scheme of claim 2 wherein descriptions that conform to said description scheme are in XML format,” see § 3.1, “<?XML version=“1.0”>.”

6. Qian teaches “The description scheme of claim 2 wherein said navigation attributes enables selection of a plurality of said segments,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute.”

7. Qian teaches “The description scheme of claim 2 wherein each of said segments defines a plurality of frames that are contiguous in time,” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

8. Qian teaches “The description scheme of claim 2 wherein each of said segments defines a plurality of frames that belong to a single said video,” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

9. Qian teaches “A segmentation description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see

§ 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “and (b) a segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) at least one single segment information description scheme; (ii) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

10. Qian teaches “The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies a plurality of said single segment information description schemes,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute.”

11. Qian teaches “The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies a plurality of said other segment group information description schemes,” see § 3.1.2, “<EventView> <Events name=“”>...</Events>

Art Unit: 2168

<Events name="">...</Events>,” where the claimed “at least one other segment group information description scheme” is at least one of the referenced “<Events>.”

12. Qian teaches “The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies one and only one said single segment information description scheme,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>.”

13. Qian teaches “The segmentation description scheme of claim 9 wherein said single segment information description scheme identifies the content of said video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “content” is the referenced “start-frame-id end-frame-id display-frame-id.”

14. Qian teaches “The segmentation description scheme of claim 9 wherein said single segment information description scheme identifies the location of said video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “location” is the referenced “id.”

15. Qian teaches “A segmentation description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-

Art Unit: 2168

frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “and (b) a segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) a group of segments comprised of at least one single segment of said video; (ii) at least one other subgroup of segments contained within said group,” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>,” where the claimed “group of segments” is at least one of the referenced “<Events>.”

16. Qian teaches “The segmentation description scheme of claim 15 wherein said group of segments is comprised of a plurality of said single segments of said video,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

17. Qian teaches “The segmentation description scheme of claim 15 wherein said segment group information description scheme identifies a plurality of said other subgroups of segments,” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>.”

Art Unit: 2168

18. Qian teaches “The segmentation description scheme of claim 15 wherein said group of segments is comprised of one and only one of said single segments of video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>.”

19. Qian teaches “The segmentation description scheme of claim 15 wherein said single segment information description scheme identifies the content of said video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “content” is the referenced “start-frame-id end-frame-id display-frame-id.”

20. Qian teaches “The segmentation description scheme of claim 15 wherein said single segment information description scheme identifies the location of said video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “location” is the referenced “id.”

21. Qian teaches “A description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “and (b) a segment group information description scheme where said segment group information description scheme identifies at least two other subgroups of segments, wherein each of said other subgroups characterize the same content of said video in a different manner,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>,” where the claimed “segment group information description scheme” is the referenced “<EventProfile>” and the referenced “at least two other subgroups” are the referenced “<Duration>... <Text>... <Audio>” tags.

22. Qian teaches “The description scheme of claim 21 wherein said different manner includes at least two summaries of different durations,” see § 3.1.3, “<EventProfile>... <Text> text-annotation </Text> <Audio> voice-annotation </Audio>.”

27. Qian teaches “A description scheme related to a plurality of videos comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said videos, where said identifies includes an attribute identifier to identify one of said videos and a location identifier to indicate the location of said segment in said one of said videos,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>,” the claimed “attribute identifier” is the referenced “id,” and the claimed “location identifier” is the referenced “start-frame-id end-frame-id.”

Qian teaches “and (b) a segment group information description scheme where said segment group information description scheme identifies a plurality of said single segment information description schemes, wherein at least two of said single segment information description schemes include said attribute identifiers identifying different ones of said videos,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<Event>.”

28. Qian teaches “A description scheme related to a plurality of videos comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said videos, where said identifies includes an attribute identifier to identify one of said videos and a location identifier to indicate the location of said segment in said one of said videos,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>,” the claimed “attribute identifier” is the referenced “id,” and the claimed “location identifier” is the referenced “start-frame-id end-frame-id.”

Qian teaches “and (b) a segment group information description scheme where said segment group information description scheme identifies a plurality of said single segments of video, wherein at least two of said single segments of video include said attribute identifiers

identifying different ones of said videos,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<Event>.”

29. Qian teaches “The description scheme of claim 28 wherein said plurality of different said videos are arranged into a single video presentation to a viewer,” see § 1, “You start interacting with the appliance... The appliance... invokes your user profile (which is indeed different than your spouse’s and children) to customize your viewing experience and anticipate your needs.”

30. Qian teaches “A description scheme related to a video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme locates a segment of said video,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “and (b) said locates is based upon a time base of said video, a starting point of said segment with respect to said time base, and a duration of said segment in terms of time units,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id

display-frame-id </Clip>,” where the claimed “locates” is the referenced “start-frame-id end-frame-id.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al., “Description Schemes for Consumer Video Applications,” ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999 (Qian), in view of Yeo et al., “Retrieving and Visualizing Video,” Communications of the ACM, December 1997 (Yeo).

23. Qian teaches “A table of contents related to video comprising,” see § 3.1.2, “The key frames may be organized in a hierarchical manner and the hierarchy is captured by the descriptor <KeyFrames> with a level attribute.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “(b) a segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The

descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) at least one single segment information description scheme; (ii) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

Qian does not teach “(c) wherein said table of contents includes a hierarchical representation of the interrelationship of said single segments of video and said groups of segments, where the hierarchical representation is viewable by a viewer.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “segments” are the referenced “shots.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

24. Qian teaches “A table of contents related to video comprising,” see § 3.1.2, “The key frames may be organized in a hierarchical manner and the hierarchy is captured by the descriptor <KeyFrames> with a level attribute.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “(b) a segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) at least one single segment information description scheme; (ii) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

Qian does not teach “(c) wherein said table of contents includes a hierarchical representation of the interrelationship of said single segment information description schemes and said segment group information description schemes, where the hierarchical representation is

viewable by a viewer.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “description schemes” are the referenced “attributes.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

25. Qian teaches “A description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “(b) a first segment group information description scheme where said first segment group information description scheme identifies at least two other segment group information description schemes, wherein each of said other segment group information description schemes characterize the same content of said video in a different manner,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>,” where the claimed “segment group

information description scheme” is the referenced “<EventProfile>” and the referenced “at least two other subgroups” are the referenced “<Duration>... <Text>... <Audio>” tags.

Qian teaches “(c) a second segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) at least one single segment information description scheme; (ii) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

Qian teaches “(e) wherein a segment group information description scheme may be characterized in the manner of subsection (b) or subsection (d), but not both,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>.”

Qian does not teach “(d) wherein said second segment group information description scheme includes a hierarchical representation of the interrelationship of said identified said single segment information description schemes and identified said segment group information description schemes, where the hierarchical representation is viewable by a viewer.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured

between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “description schemes” are the referenced “attributes.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

26. Qian teaches “A description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme identifies one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “(b) a segment group information description scheme where said segment group information description scheme identifies at least two other subgroups of segments, wherein each of said other subgroups characterize the same content of said video in a different manner,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>,” where the claimed “segment group information description scheme” is the referenced “<EventProfile>” and the

referenced “at least two other subgroups” are the referenced “<Duration>... <Text>... <Audio>” tags.

Qian teaches “(c) a segment group information description scheme where said segment group information description scheme identifies either but not both of,” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute,” where the claimed “segment group information description scheme” is the referenced “<EventView>.”

Qian teaches “(i) a group of segments comprised of at least one single segment of said video; (ii) at least one other subgroup of segments contained within said group,” see § 3.1.2, “<EventView> <Events name="">...</Events> <Events name="">...</Events>,” where the claimed “group of segments” is at least one of the referenced “<Events>.”

Qian teaches “(e) wherein a segment group information description scheme may be characterized in the manner of subsection (b) or subsection (d), but not both,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>.”

Qian does not teach “(d) wherein said table of contents includes a hierarchical representation of the interrelationship of said single segments of video and said groups of segments, where the hierarchical representation is viewable by a viewer.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have

Art Unit: 2168

one scene or several scenes,” where the claimed “segments” are the referenced “shots.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant’s disclosure: U.S. 2002/0069218, U.S. 2002/0108112, U.S. 6,490,320, U.S. 2003/0177503, U.S. 6,675,158, and U.S. 6,741,655.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Sanders whose telephone number is 571-270-1016. The examiner can normally be reached on M-F 9:00a-4:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2168

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30 April 2008

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